Mathematics Major Check-Off Form: Mathematics for Teaching BA
(Major Declared *Spring 2020 and Thereafter)*

Name:	
Student ID #:	Expected Graduation (month & year):

- C average (2.0) required in courses fulfilling the Mathematics majors.
- No requirement for the mathematics major (BA or BS) may be taken P/F
- At least **four** Mathematics courses numbered 300s or more must be taken at UMB.
- **Capstone requirement** may be met through any of the courses with numbers between 420-499

Required Core Math Courses:

Sem	Grade	Course	Sem	Grade	Course
		MATH 140 – Calculus I			**MATH 291** – Mathematical Software
		MATH 141 – Calculus II			**MATH 314** – Intro to Proofs
		MATH 242 – Multivariable & Vector Calc			**MATH 345** – Prob & Stats
		MATH 260 – Linear Algebra			**PHYSIC 113** – Fundamentals of Physics I
		MATH 265 – Discrete Structures in Math			**CS 110** – Intro to Computing
		MATH 270 – Applied ODEs			

Concentration Requirements:

Electives must be chosen from MATH 300+ courses.

Sem	Grade	Course
		MATH 360 – Abstract Algebra I
		MATH 370 – History of Math
		MATH 458 – Theory of Numbers
		MATH 460 – Survey of Geometry
		Elective #1 – **MATH**
		Elective #2 – **MATH**

*__Advisors:__ Please release the advising hold at the end of the advising session if you feel the student is ready to register. Navigate to "Advising Center" -->"Student Summary All Terms (UM)" --> "⊘" symbol on top of the page --> "ADV" in the holds list --> Release. If the student shows math as their additional major (AM), ensure that the student see's their primary major's advisor to release the hold. If you have any questions, please contact math@umb.edu.

<u>Courses Offered Fall, Spring, and Summer:</u>

    MATH 115 – College Algebra
    MATH 125 – Introductory Statistics
    MATH 130 – Precalculus
    MATH 140 – Calculus I
    MATH 141 – Calculus II
    MATH 240* – Multivariable Calculus ("Calculus III")
    MATH 242* – Multivariable and Vector Calculus
    MATH 260* – Linear Algebra
    MATH 345 – Probability and Statistics I

* During the summer, this course is typically only offered during SS2

<u>Courses Offered Fall and Spring Only:</u>

    MATH 114QR – Quantitative Reasoning
    MATH 135 – Survey of Calculus
    MATH 270 – Ordinary Differential Equations
    MATH 314 – Introduction to Proofs

<u>Courses Offered Fall Only:</u>

    MATH 291 – Mathematical Software
    MATH 309 – Financial Mathematics
    MATH 358 – Complex Analysis
    MATH 360 – Abstract Algebra I
    MATH 390 – Math Problem Solving Seminar
    MATH 425 – Numerical Analysis
    MATH 447 – Probability Models
    MATH 455 – Introduction to Statistical Machine Learning
    MATH 460 – Survey of Geometry

<u>Courses Offered Spring Only:</u>

    MATH 265 – Discrete Structures in Mathematics
    MATH 361 – Abstract Algebra II
    MATH 370 – History of Mathematics
    MATH 426 – Numerical Linear Algebra
    MATH 440 – Topology
    MATH 448 – Computational Statistics
    MATH 450 – Real Analysis
    MATH 458 – Theory of Numbers

<u>Courses Offered Summer Only:</u>

    MATH 470 – Mathematical Logic (SS1)